

ABSTRACT

A radiation projection detector includes a conversion layer configured to generate light photons in response to a radiation, the conversion layer having a plurality of first conversion elements and a plurality of second conversion elements, and a photo detector array aligned with the conversion panel, wherein each of the first conversion elements has a first radiation conversion characteristic, and each of the second conversion elements has a second radiation conversion characteristic. A radiation projection detector includes a photoconductor layer configured to generate charges in response to radiation, the photoconductor layer having a plurality of first photoconductor elements and a plurality of second photoconductor elements, and a detector array aligned with the photoconductor layer, wherein each of the first photoconductor elements has a first charge generating characteristic, and each of the second photoconductor elements has a second charge generating characteristic.

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